

15. (Amended) A method for reducing levels of tack in a skin care composition comprising:

a) a polyacrylamide polymer having a number average molecular weight of greater than 20,000 and;

b) a cation containing, water-swellable polymer;

wherein said composition comprises less than 4% of an anionic, zwitterionic, or amphoteric surfactant.

16. delete.

REMARKS

Application Amendments

Claims 1, 10 and 15 have been amended by way of the present amendments. Support for these amendments can be found in the claims as originally filed. Claims 7, 8, 9 and 16 have been deleted. No new matter has been added and no additional fee is believed to be due at this time.

The Rejections Under 35 USC § 112 Second Paragraph

Claims 7-16 are rejected under 35 USC § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Specifically, the Examiner states that Claim 7 recites number average molecular weight of greater than 50,000 and also recites an especially greater than 100,000 limitation which is another statement of the molecular weight limitation within the same claim. Claim 7 has been deleted for reasons unrelated to patentability. Therefore the rejection is moot.

The Examiner states that Markush language should be used in Claim 8. Claim 8 has been deleted for reasons unrelated to patentability. Therefore the rejection is moot.

Claim 16 is rejected because the Examiner states that the claim does not set forth any steps that are involved in the method. Additionally, the Examiner rejects Claim 16 under 35 USC 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process. Claim 16 has been deleted for reasons unrelated to patentability. Therefore the rejection is moot.

Claim 15 is rejected because the Examiner states that the claim provides for the use of "a cation containing polymer" and "a composition comprising a polymeric thickening agent"

respectively. The Examiner states that since the claim does not set forth any steps involved in the method process, it is unclear what method/ process Applicant is intending to encompass. Additionally, the Examiner rejects Claim 15 under 35 USC 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process.

The Applicant has amended Claim 15 to reflect a proper method claim and respectfully requests that the rejection be removed.

Rejection Under 35 USC § 102

Jones et al. WO 96/03967

Claims 1-5, 15 and 16 are rejected under 35 USC § 102(b) as anticipated by Jones et al. WO 96/03967. The Examiner states that Jones discloses a cosmetic composition comprising a gelling agent and conditioning polymer. The gelling agent comprises a copolymer of methyl vinyl ether/maleic anhydride that is cross-linked with PVM/VA decadiene crosspolymer. The Examiner further states that the Jones composition further comprises a hair fixative polymer that is a cationic copolymer of hydroxyethyl cellulose and diallyl dimethyl ammonium chloride known as Polyquaternium 4. The Examiner states that composition of Jones comprises from about 0.1% to about 10% by weight of a hair fixative polymer, the composition can be formulated as a leave-in hair cosmetic, the composition provides reduced on-hair and on-hand tack, and the composition can optionally contain preservatives, surfactants, block polymers, thickeners and viscosity modifiers. Applicant respectfully traverses this rejection based on the amendments and remarks contained herein.

Jones does not disclose the use of polyacrylamide polymers as polymeric thickening agents. Instead it refers to a specific cationic hair fixative polymer. The polyacrylamide polymers of the present invention are water dispersible polymers. The water dispersible polymers are distributed throughout the medium. The cationic hair fixative polymers of the Jones reference are water soluble. The cationic hair fixative polymers are dissolved in the medium. Additionally, in the present invention the polyacrylamide polymers, synthesized by reverse phase emulsion polymerization, are predispersed in a water immiscible solvent such as mineral oil which helps to facilitate water dispersibility of the polyacrylimide which provides mixtures with low levels of stickiness or tack. Applicant finds no teaching or motivation in Jones to use the polyacrylamide polymer as a polymeric thickening agent.

Jones discloses hair fixative compositions rather than skin compositions. The main purpose of Jones' composition is to hold hair in a set style wherein the presently claimed composition provides a water barrier over the skin. To accomplish creation of a water

barrier, it is important to select polymeric materials that are water-swellable, having an inherent ability to retain water in order to increase volume in an aqueous environment. The now claimed water swellable polymers have an inherent glass transition temperature of less than 0°C that would not provide adequate hair styling benefits. The Jones polymers would have to be greater than 0°C to accomplish the hair styling benefits that the reference teaches. The polymers of the present invention however, do accommodate formation of the water barrier essential to the present invention.

Accordingly, Claims 1-5 and 15 are novel over the prior art of record.

Rejection Under 35 USC § 103(a)

Jones et al. WO 96/03967

Claims 6-14 are rejected under 35 USC § 103(a) as being unpatentable over Jones. The Examiner states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Jones to prepare a hair composition. The Examiner states that the present invention generally claims a composition and future intended use is not critical in a composition claim. According to the Examiner, head hair is on the scalp, which is skin, and body hair is on the skin. The Jones composition comprises from about 0.1% to about 10% of a hair fixative that is selected from cationic and non-ionic resins, cationic or non-ionic polymer, having a molecular weight in the range from about 1,000 to 5,000,000. Additionally, the composition is soluble or colloidally dispersible in the cosmetic carrier. The composition contains a cationic copolymer of hydroxyethyl cellulose and diallyl dimethyl ammonium chloride known as Polyquaternium 4 and a carrier selected from C₁-C₆ alkanols, carbitol, acetone and mixtures thereof. Additionally, the Examiner feels that one having ordinary skill in the art would have been motivated to prepare a leave-in hair fixative composition comprising from about 0.1% to about 10% of polymeric thickener since Jones teaches a composition comprising from about 0.1% to about 10% of hair fixative polymer reduces on-hair and on-hand tack. Applicant respectfully traverses this rejection, based on the amendments and remarks contained herein.

Applicant asserts that the arguments presented above in traversing the § 102 rejection also apply to the present rejection. Jones fails to teach or disclose the use of a polyacrylamide polymer as the thickening agent and provides no motivation to substitute the Jones' disclosed gelling agent with the thickening agent claimed in the present invention. Additionally, the unexpected benefits, i.e. a composition with low levels of stickiness or tack, found in the present invention from the incorporation of cation containing polymers into a leave-on cosmetic composition as claimed was not disclosed or suggested in the Jones

reference. One of ordinary skill in the art would have no motivation to select the use of polyacrylamide polymers as the thickening agent based on the disclosure of Jones. Additionally, the present application is directed to topical application of the composition to the skin. The Jones reference is directed to a hair cosmetic composition that demonstrates excellent hair styling benefits which allows the hair to retain a particular shape. The composition of Jones would be of no value for use as a topically applied to the skin. Although hair is present on the skin, the ability to have this hair retain a particular shape is not a benefit that one of ordinary skill in the art would recognize or consider.

Accordingly, Claims 6-14 under 35 USC § 103(a) are novel and nonobvious over the prior art of record.

CONCLUSION

In light of the amendments to the claims and the above remarks presented herein, Applicants' respectfully submit that the Claims 1-6 and 10-15 are allowable over the prior art of record. Reconsideration is respectfully requested. In the event that issues remain prior to allowance of the noted claims, then the Examiner is invited to call Applicants' undersigned attorney to discuss any remaining issues.

Respectfully submitted,

By M. Dressman

Marianne Dressman
Attorney for Applicants
Registration No. 42,498
(513) 626-0673

September 30, 2002

Customer Number 27752

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A leave-on cosmetic composition suitable for topical application to the skin comprising:

- a) a [polymeric thickening agent selected from the group consisting of non-ionic and anionic thickening agents, and mixtures thereof] polyacrylamide polymer having a number average molecular weight of greater than 20,000 and;
- b) a cation containing, water-swellable polymer;

wherein said composition comprises less than 4% of an anionic, zwitterionic, or amphoteric surfactant.

10 (Amended) A composition according to Claim 6 comprising from about 0.01% to about 10% by weight of the [polymeric thickening agent, or mixtures thereof.] polyacrylamide polymer.

15. (Amended) [Use of a cation containing polymer, or mixtures thereof, for reducing levels of tack in a skin care composition comprising a polymeric thickening agent selected from non-ionic and anionic thickening agents, or mixtures thereof, having a number average molecular weight of greater than 20,000.] A method for reducing levels of tack in a skin care composition comprising:

- a) a polyacrylamide polymer having a number average molecular weight of greater than 20,000 and;
- b) a cation containing, water-swellable polymer;

wherein said composition comprises less than 4% of an anionic, zwitterionic, or amphoteric surfactant.